

TWO NEW SPECIES OF *STEVIA* (ASTERACEAE, EUPATORIEAE) FROM MEXICO

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ABSTRACT

Stevia hintoniorum B. Turner, a species from near Iturbide, Nuevo León, México and *S. pratheri* B. Turner, from Chiapas, are described as new. The former is related to the locally sympatric *S. incognita* Grashoff, the latter to *S. tomentosa* H.B.K.

KEY WORDS: Asteraceae, Eupatorieae, *Stevia*, México

Routine identification of Mexican Asteraceae has revealed the following novelties.

Stevia hintoniorum B. Turner, *sp. nov.* TYPE: MEXICO. Nuevo León: Mpio. Galeana, above Agua Blanca, "oak and pine woods on limestone," 2390 m, 25 Oct 1991, *G.B. Hinton et al.* 21611 (HOLOTYPE: TEX).

Steviae incognitae Grashoff similis sed foliis majoribus ellipticis vel oblanceolatis fere glabrisque et bracteis involucro sin glandulis stipitatis differt.

Erect or sprawling herbs 40-80 cm high. Stems tawny to purplish, puberulent. Leaves sparsely puberulent to subglabrous, opposite throughout, at mid-stem mostly shorter than the internodes, elliptic ovate to oblanceolate, mostly 4-9 cm long, 2.0-4.5 cm wide; petioles mostly 2-10 mm long; blades trinervate from above the base, glandular punctate on lower surfaces, the margins serrate. Heads sessile and numerous in congested terminal corymbs, the branches below the heads decidedly glandular pubescent. Involucres 7-9 mm high, subglabrous or sparsely puberulent, sometimes atomiferous glandular (*i.e.*, with sessile amber colored resinous glands) but not at all glandular pubescent, the bracts linear-lanceolate with acute apices. Corollas purple, 7-8 mm long, the

tube and throat both sparsely pilose and atomiferous glandular, the lobes more so. Achenes ca. 5 mm long, sparsely hispidulous, the pappus a fimbriate crown 0.3-0.8 mm high.

ADDITIONAL SPECIMENS EXAMINED: MEXICO. Nuevo León: Mpio. Galeana: above Agua Blanca, 2050 m, 25 Oct 1991, *Hinton et al.* 21626 (TEX); 10.6 km W of Ejido La Purisima, ca. 2100 m, 27 Oct 1982, *Sundberg* 1922 (TEX). Mpio. Iturbide: Iturbide to La Purisima, 2070 m, 25 Oct 1991, *Hinton et al.* 21664 (TEX); 3.3 km W of Ejido La Purisima, ca. 1600 m, 27 Oct 1982, *Sundberg* 1897 (TEX).

In Grashoff's (1972) account of the North American *stevias*, the above cited specimens key with ease to *Stevia clinipodioides* Greenm. The latter, however, is a taxon of southcentral and southern México (type from Serrania de Ajusco, Distrito Federal, ca. 3000 m) and is a slender rhizomatous perennial to 35 cm high with oblanceolate, conduplicate, leaves 1.5-3.5 cm long and 0.5-1.2 cm wide. As indicated in the description, *S. hintoniorum* is a robust herb of lower elevations, being 40-80 cm high and having much larger nonconduplicate leaves. Overall, *S. hintoniorum* appears most closely related to the poorly defined, but widespread, *S. incognita* Grashoff. It differs from the latter in having eglandular involucre bracts and mostly elliptic, nearly glabrous leaves. *Stevia incognita* occurs in Nuevo León at higher elevations (e.g., on Cerro Potosí and Peña Nevada) than does *S. hintoniorum* but occasional hybrids between *S. incognita* and *S. hintoniorum* presumably occur, to judge from seemingly intermediate plants from the lower slopes of Peña Nevada (*Ayers* 504 [TEX]).

Stevia pratheri B. Turner, *sp. nov.* TYPE: MEXICO. Chiapas: Mpio. Ixtapa, 4.2 km S of Ixtapa along route 195, steep dry slope with *Juniperus*, *Acacia*, and *Pinus*, ca. 1150 m, "Rare in full sun on dry rocky banks of creek," 8 Jan 1992, *Alan Prather* 1144 (with J. Soule) (HOLOTYPE: TEX; Isotype: MEXU).

Steviae tomentosae Kunth similis sed differt foliis omnino oppositis et capitulis in pedunculis primariis nudiusculis (usque ad 20 cm longis foliis deminutia paribus tantum 2-3).

Perennial herb 30-40 cm high. Stems white tomentose. Leaves opposite throughout, bicolored, mostly 2.5-3.5 cm long, 6-12 mm wide; petioles 8-12 mm long; blades ovate, trinervate, sparsely tomentose above, the lower surfaces densely white felty tomentose, the margins crenulodentate. Heads arranged in an obpyramidal corymbose terminal cluster, these borne on a rather naked primary peduncle ca. 20 cm long, the latter having only 3-4 pairs of reduced leaves, the ultimate peduncles tomentose, 1-3 mm long. Involucres mostly 5-7 mm long, the bracts linear-lanceolate, tomentulose, the apices acute. Florets

5 per head, the corollas white, ca. 5 mm long, the lobes ca. 0.8 mm long, sparsely pubescent and atomiferous glandular on the outer surfaces. Achenes black, somewhat tangentially compressed, sparsely hispidulous, the pappus of 4 of the achenes a minute fimbriate crown ca. 0.3 mm high, the remaining achene with a pair of weak bristles 1-2 mm long, in addition to the fimbriate crown.

Because of its markedly bicolored leaves and head clusters borne upon rather naked primary peduncles, this is a very distinctive species. The somewhat flattened achenes with weakly developed pappus bristles also distinguish the taxon. It will not key in Grashoff's treatment of the genus, but it might be compared with *Stevia tomentosa*, the latter readily distinguished by having stems about equally leafy throughout, the upper leaves mostly alternate, and the pappus bristles more numerous and stouter, up to 6 mm long.

According to Grashoff (1972), *Stevia tomentosa* is distributed from southern Puebla to southern Coahuila, mostly on the Central Plateau. *Stevia pratheri* is apparently restricted to Chiapas, there being nothing like it from Oaxaca or Guatemala (Grashoff 1976).

It is a pleasure to name this species for its primary collector, Mr. Alan Prather, doctoral student at the University of Texas working on a monograph of the genus *Cobaea* (Polemoniaceae).

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